REMARKS

This is a full and timely response to the outstanding non-final Office Action mailed April 18, 2005. Reconsideration and allowance of the application and pending claims are respectfully requested.

I. Drawings Objection

The drawings have been objected to under 37 C.F.R. 1.83(a) for not showing every feature of the invention specified in the claims.

In response to this objections, Figure 4B has been amended to replace "122" with "122". No new matter has been added.

In view of the above-noted amendments to the drawings, Applicant respectfully submits that the drawings are acceptable and respectfully requests that the objection be withdrawn.

II. Specification Objection

The specification has been objected to for containing various typographical errors. In response to the objection, Applicant has amended the specification to correct those typographical errors, as is indicated above. No new matter has been added.

In view of these above-described specification amendments, Applicant respectfully submits that the specification is not objectionable, and therefore respectfully requests that the objection be withdrawn.

III. Double Patenting Rejections - Obviousness-type Double Patenting

Claims 1-12 and 15-16 have been rejected under the doctrine of obviousness-type double patenting as being unpatentable in view of claims 1-10 and 11-19 of U.S. Patent No. 6,541,792 ("the '792 patent").

Although Applicant does not concur that claims 1-12 and 15-16 are unpatentable in view of claims 1-10 or 11-19 of the '792 patent, Applicant, in the interest of expediting issuance of a patent, has submitted herewith a terminal disclaimer that disclaims any portion of term for a patent issuing from the present application that will extend beyond the term of the '792 patent. Applicant therefore respectfully requests that the rejection be withdrawn.

IV. Claim Rejections - 35 U.S.C. § 102(b) or (e)

Claim 9 has been rejected under 35 U.S.C. § 102(b) or (e) as being anticipated by Raberg (U.S. Pub. No. 2003/0132468). Applicant respectfully traverses this rejection.

It is axiomatic that "[a]nticipation requires the disclosure in a single prior art reference of each element of the claim under consideration." W. L. Gore & Associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 1554, 220 USPQ 303, 313 (Fed. Cir. 1983). Therefore, every claimed feature of the claimed invention must be represented in the applied reference to constitute a proper rejection under 35 U.S.C. § 102.

As is noted above, claim 9 has been amended to specify that the described tunnel junction is an "antifuse" tunnel junction. Applicant notes that Raberg does not teach such a tunnel junction. Applicant therefore respectfully requests that the rejection be withdrawn.

V. Claim Rejections - 35 U.S.C. § 102 or §103

Claims 1, 2, and 9 have been rejected under 35 U.S.C. § 102 or 35 U.S.C. § 103(a) as being unpatentable over <u>Lee, et al.</u> (U.S. Pub. No. 2004/0174740) or <u>Lu, et al.</u> ("Lu," U.S. Pat. No. 6,816,431). Applicant respectfully traverses this rejection.

As is noted above, independent claims 1 and 9 have been amended to specify that the tunnel junction recited in those claims is an "antifuse". Neither Lee nor Lu teach or suggest such a tunnel junction. Applicant therefore respectfully submits that neither Lee nor Lu anticipate or render obvious Applicant's claims. Accordingly, Applicant requests that the rejection of these claims be withdrawn.

VI. Canceled Claims

Claims 3 and 13-14 have been canceled from the application without prejudice, waiver, or disclaimer. Applicant reserves the right to present these canceled claims, or variants thereof, in continuing applications to be filed subsequently.

CONCLUSION

Applicant respectfully submits that Applicant's pending claims are in condition for allowance. Favorable reconsideration and allowance of the present application and all pending claims are hereby courteously requested. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (770) 933-9500.

Respectfully submitted,

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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail, postage prepaid, in an envelope addressed to: Assistant Commissioner for Patents, Alexandria, Virginia 22313-1450, on

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Signature